506

SEMI-ANNUAL (THIRD AND FOURTH QUARTER) 2006 DISCHARGE MONITORING REPORT

Compliance File CI-95-036, SLIC 0420
Order No. R4-2002-0030 (Series 007)

Boeing Realty Corporation
Former C-6 Facility (Building 2 Area)
Long Beach, California

Prepared by:

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January 25, 2007

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Information Technology Unit
California Regional Water Quality Control Board
Los Angeles Region (RWQCB)
320 West 4th Street, Suite 200
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Re: Semi-Annual (Third and Fourth Quarter) 2006 Discharge Monitoring Report
Waste Discharge Requirements Order Number R4-2002-0030 (Series 007)
Compliance File Number CI-95-036, SLIC 0410
Project Site: Former Boeing C-6 Facility (Building 2 Area), Los Angeles, California

Information Technology Unit:

On behalf of Boeing Realty Corporation (BRC), Tait Environmental Management, Inc. (TEM) is submitting this semi-annual groundwater monitoring report per the Waste Discharge Requirements (WDR) Order Number R4-2002-0030 (Series 007). The purpose of this report is to provide the Los Angeles Regional Water Quality Control Board (RWQCB) with a summary of bioremediation amendment injection and groundwater monitoring activities performed at the above-referenced project site. The site is located at 19503 Normandie Avenue, Los Angeles, California. Figure 1 provided by Camp Dresser McKee, Inc. (CDM) illustrates the site layout.

This monitoring report summarizes groundwater amendment and monitoring activities performed during the third and fourth quarter of 2006. Amendment activities performed during the reporting period are summarized in Section 1.0. Groundwater monitoring activities performed to evaluate the distribution of amendment solution are summarized in Section 2.0. A certification statement is provided in Section 3.0.

1.0 AMENDMENT ACTIVITIES

Amendment activities (carbohydrate injection or water injection testing activities) were not conducted during the third and fourth quarter of 2006.

2.0 MONITORING ACTIVITIES

During the third and fourth quarter of 2006, quarterly groundwater monitoring was performed at the site. Per the WDR monitoring schedule, quarterly groundwater monitoring follows the initial nine months of post-injection groundwater monitoring (sample Week 2, Week 6, Week 12, Week 16, Week 21, and Week 36 after the first injection).

Third quarter groundwater monitoring was conducted on September 9 through 13, 2006. Fourth quarter groundwater monitoring was performed on December 4 through 7, 2006. During the third and fourth quarter 2006 monitoring events, 16 monitoring wells (IRZB0081, IRZB0095, IRZMW001A/B, IRZMW002A/B, IRZMW003A/B, IRZMW004, IRZMW005, IRZCMW001, IRZCMW002, IRZCMW003, CMW001, CMW002, and CMW026) were gauged and sampled. The monitoring well locations are identified on Figure 1 provided by CDM. Groundwater samples were collected using low flow sampling techniques, so that the purge rate was generally less than 600 milliliters per minute (mL/min) and drawdown while purging was less than 1 foot. The groundwater samples from the third and fourth quarter 2006 monitoring were analyzed for volatile organic compounds (VOCs) and total sulfides. Field parameters of purged groundwater were also collected (ferrous iron, hydrogen sulfide, pH, dissolved oxygen [DO], oxidation reduction potential [ORP], specific conductance, and temperature).

Field parameter data are presented in Table 1. Inorganic and permanent gases analytical results from past sampling events are provided as Table 2 and Table 4, respectively (bromide, chloride, total iron, dissolved manganese, total manganese, nitrate, nitrite, sulfate, dissolved oxygen, carbon dioxide, nitrogen, methane, ethane and ethene were previously sampled, but not during the third and fourth quarter 2006 monitoring events). Current and previous analytical results for selected VOCs detected in one or more groundwater monitoring wells are summarized in Table 3. Laboratory analytical data with associated chain-of-custody documentation are provided in Appendix A. Sample collection logs with field parameters and monitoring well sampling data are maintained in the project files and are not provided with this report.

Prior to collecting the groundwater samples, depth to groundwater was measured in each monitoring well using a water level meter accurate to 0.01 feet. Figures 2 and 3 provided by CDM show the groundwater elevation contours for Zones B and C in September 2006. Groundwater flow in the both zones (B and C Sand) is generally to the south/southwest with an average gradient of 0.002 ft/ft.

The sampling methodology also involved use of a flow-through cell that contains field instrumentation (Horiba U22) used to measure groundwater stabilization parameters (i.e., temperature, pH, specific conductance, ORP, and DO). For each monitoring well, the flow-through cell was connected to a submersible pump with dedicated polyethylene tubing. Once the field parameters stabilized, groundwater samples were collected in laboratory-prepared containers. Ferrous Iron and Hydrogen Sulfide testing was performed using a colorimetric method (HACH DR890 Instrument) in the field. Field parameters and other relevant sampling data were documented on sample collection logs. The groundwater samples were transported in a chilled ice chest with proper chain-of-custody documentation to an analytical laboratory (TestAmerica, Analytical Testing Corporation) certified by the State of California.

3.0 CERTIFICATION STATEMENT

I declare under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who managed the system or those directly responsible for gathering the information, the information submitted, is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

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Joseph Weidmann, Haley & Aldrich
Paul McCabe, Sunrider
Project File

Attachments:
Figure 1 - Well Location Map
Figure 2 - B - Sand Groundwater Elevations - September 2006
Figure 3 - C - Sand Groundwater Elevations - September 2006
Table 1 - Groundwater Parameter, Total Sulfides, and Total Organic Carbon Results
Table 2 - Inorganic Analytical Results
Table 3 - Selected Volatile Organic Compounds (VOCs) Analytical Results
Table 4 - Permanent Gas Analytical Results
Appendix A - Laboratory Reports and Chain-of Custody Documents